

Postural assessment of retail checkout operators

■ Nabila Rehman and Namrata Arora Charpe

Received: 29.10.2018; Revised: 12.04.2019; Accepted: 22.04.2019

■ **ABSTRACT :** In retail industry checkout operators or cashiers play pivotal role in the system by performing repetitive manual material handling tasks while scanning and handling products which requires to select, grab, lift, orientate, move and place various articles at checkstands or tills along with static work posture which result in high risk of musculo-skeletal disorders, awkward postures, muscle fatigue and other discomforts such as back pain, disc pressure, reduced circulation, pregnancy related problem etc. among the checkout operators. The research paper elucidates the risk checkout operators are being exposed during their occupational hours. Study was carried out on 250 checkout operators with minimum 6 months of experience in the same job profile using postural analysis tool REBA method. Video of the subjects was captured performing entire checkout process and snapshots were taken from the video for the analysis. The result divulges that Task I and Task II *i.e.* manual material handling and monetary transaction are the most demanding tasks which have been found to be exposed to high risk for long duration in the entire checkout process with more than half of the population 61.6 per cent postures of checkout operators were found to be unacceptable and require corrective action including further assessment as soon as possible. However, only 6.4 per cent of sample in manual material handling task and 5.2 per cent in monetary transaction reported very high risks and testified that corrective action along with further assessment is necessary at the existing workstation. Besides less than half *i.e.* 46.7 per cent of operators described the task of customer handling as medium risk in which corrective action along with further assessment seems to be necessary. As a result above investigation recommends redesigning of checkstand with respect to Indian anthropometry followed by ergonomic training and awareness to enhance efficiency of retail operators and minimize their occupational health hazards.

See end of the paper for authors' affiliations →

Nabila Rehman

Faculty of Home Science,
Banasthali Vidyapith, Banasthali
(Rajasthan) India
Email : nabila.rhmn@gmail.com

■ **KEY WORDS:** Postural assessment, Retail, Cashiers, REBA

■ **HOW TO CITE THIS PAPER :** Rehman, Nabila and Charpe, Namrata Arora (2019). Postural assessment of retail checkout operators. *Asian J. Home Sci.*, 14 (1) : 62-68, DOI: 10.15740/HAS/AJHS/14.1/62-68. Copyright© 2019: Hind Agri-Horticultural Society.